

7. (Cancel) The method of Claim 6, wherein the plurality of derivative characteristics for each derivative in the plurality of derivatives comprises at least one retrieved derivative characteristic and at least one calculated derivative characteristic, the method further comprising:
determining at least one calculated derivative characteristic based on the retrieved derivative data.

8. (Cancel) The method of Claim 7, wherein the step of determining the calculated derivative characteristics comprises determining a volatility for each derivative in the plurality of derivatives.

9. (Cancel) The method of Claim 57, further comprising creating a report containing the identified derivatives having relative reference values which satisfy the reference criteria.

10. (Cancel) The method of Claim 9, further comprising transmitting the report over a communication network.

11. (Cancel) The method of Claim 9, further comprising providing in the report a derivative characteristic of the identified derivatives having relative reference values which satisfy the reference criteria.

12. (Cancel) The method of Claim 3, wherein:
the plurality of derivative characteristics includes a strike price and the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the step of determining a relative reference value for each derivative comprises calculating for a plurality of time increments a relative strike price based on the strike price of each derivative and the market price of the underlying instrument.

13. (Cancel) The method of Claim 3, wherein:
the plurality of derivative characteristics includes a strike price and the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the step of determining a relative reference value for each derivative comprises calculating for a plurality of time increments a difference between the strike price of each derivative and an at-the-money value based on the market price of the underlying instrument.

14. (Cancel) The method of Claim 13, wherein the step of identifying the derivatives having the relative reference value satisfying the reference criteria comprises:
identifying for each time increment the derivative having a strike price closest to the at-the-money value.

15. (Cancel) The method of Claim 14, further comprising:
creating a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

16. (Cancel) The method of Claim 15, wherein:
the plurality of derivative characteristics further includes a premium; and
the step of creating the report comprises creating the report having the second variable corresponding to a premium for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

17. (Cancel) The method of Claim 15, wherein:
the plurality of derivative characteristics further includes a volatility; and
the step of creating the report comprises creating the report having the second variable corresponding to a volatility for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

18. (Cancel) The method of Claim 15, wherein:

the plurality of derivative characteristics further includes a volume; and
the step of creating the report comprises creating the report having the second variable corresponding to a volume for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

19. (Cancel) The method of Claim 15, wherein:
the plurality of derivative characteristics further includes an open interest; and
the step of creating the report comprises creating the report having the second variable corresponding to an open interest for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

20. (Cancel) The method of Claim 13, wherein the step of identifying the derivatives having the relative reference value satisfying the reference criteria comprises:
for each time increment, identifying the derivative having a strike price within a selected range of the at-the-money value.

21. (Cancel) The method of Claim 20, wherein the plurality of derivative characteristics further includes a premium, and said method further comprises:
creating a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

22. (Cancel) The method of Claim 21, wherein the step of creating the report comprises creating the report having the second variable corresponding to a premium for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

23. (Cancel) The method of Claim 21, wherein the step of creating the report comprises creating the report having the second variable corresponding to a volatility for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

24. (Cancel) The method of Claim 57, wherein:
the plurality of derivative characteristics includes a trade date and an absolute expiration date; and
the step of determining a relative reference value for each derivative comprises calculating a relative expiration date for each derivative based on the trade date and the absolute expiration date.

25. (Cancel) The method of Claim 65, wherein:
the step of selecting the reference criteria for evaluating the derivatives comprises querying a user for a desired relative expiration date;
the step of identifying each derivative having the relative reference value satisfying the reference criteria comprises identifying each derivative having a relative expiration date matching the desired relative expiration date.

26. (Cancel) The method of Claim 25, further comprising:
providing a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having a relative expiration date matching the desired relative expiration date at the time indicated by the first variable.

27. (Cancel) The method of Claim 65, wherein:
the relative expiration date is a time until expiration;
the step of selecting the reference criteria for evaluating the derivatives comprises selecting a range of times until expiration; and
the step of identifying each derivative having a relative reference value satisfying the reference criteria comprises selecting for each time until expiration within the selected range of times until expiration all derivatives having a matching time until expiration.

28. (Cancel) The method of Claim 27, wherein:
providing a report having a first variable corresponding to the selected range of times until expiration and a second variable corresponding to a characteristic for the identified derivative having a relative reference value satisfying the reference criteria at the time until expiration indicated by the first variable.
29. (Cancel) A computer system for providing derivatives market information, comprising:
a database operable to maintain a plurality of derivative characteristics for each derivative in a plurality of derivatives and a plurality of underlying instrument characteristics for an underlying instrument; and
a processing facility coupled to the database, the processing facility operable to:
determine a relative reference value for each derivative in the plurality of derivatives, said relative reference value being a function of a characteristic of the derivative and an analysis characteristic;
select a reference criteria for evaluating the derivatives; and
identify each derivative having a relative reference value satisfying the reference criteria.
30. (Cancel) The computer system of Claim 66, further comprising a user interface for providing to a user access to a derivative characteristic of each identified derivative having a relative reference value which satisfies the reference criteria.
31. (Cancel) The computer system of Claim 66, wherein the analysis characteristic is a one of the plurality of underlying instrument characteristics.
32. (Cancel) The computer system of Claim 66, wherein the derivatives in the plurality of derivatives are a class of options.
33. (Cancel) The computer system of Claim 66, wherein each derivative in the plurality of derivatives is an option straddle.
34. (Cancel) The computer system of Claim 66 further comprising a data provider interface coupled to the processing facility operable to:
retrieve derivative data for the plurality of derivatives from a derivative data provider, the derivative data specifying at least one derivative characteristic for each derivative in the plurality of derivatives; and
retrieve underlying instrument data for the underlying instrument from an underlying instrument data provider, the underlying instrument data specifying at least one underlying instrument characteristic.
35. (Cancel) The computer system of Claim 34, wherein:
the plurality of derivative characteristics for each derivative in the plurality of derivatives comprises at least one retrieved derivative characteristic and at least one calculated derivative characteristic; and
the processing facility is further operable to determine at least one calculated derivative characteristic based on the retrieved derivative data.
36. (Cancel) The computer system of Claim 66, wherein the processing facility is further operable to determine a volatility for each derivative in the plurality of derivatives.
37. (Cancel) The computer system of Claim 66, wherein the processing facility is further operable to create a report containing the identified derivatives having relative reference values which satisfy the reference criteria.
38. (Cancel) The computer system of Claim 37, further comprising a user interface coupled to the processing facility operable to provide the report to a user over a communication network.

39. (Cancel) The computer system of Claim 37, wherein the report further contains a derivative characteristic of the identified derivatives having relative reference values which satisfy the reference criteria.

40. (Cancel) The computer system of Claim 31, wherein:
the plurality of derivative characteristics includes a strike price;
the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the processing facility is further operable to determine the relative reference value for each derivative in the plurality of derivatives by calculating a relative strike price based on the strike price of each derivative and the market price of the underlying instrument.

41. (Cancel) The computer system of Claim 31, wherein:
the plurality of derivative characteristics includes a strike price;
the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the processing facility is further operable to determine the relative reference value for each derivative in the plurality of derivatives by calculating for a plurality of time increments a difference between the strike price of each derivative and an at-the-money value based on the market price of the underlying instrument.

42. (Cancel) The computer system of Claim 73, wherein:
the processing facility is further operable identify each derivative having the relative reference value satisfying the reference criteria by identifying for each time increment the derivative having a strike price closest to the at-the-money value.

43. (Cancel) The computer system of Claim 42, wherein:
the processing facility is further operable to create a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

44. (Cancel) The computer system of Claim 43, wherein:
the plurality of derivative characteristics further includes a premium; and
the processing facility is further operable to create the report having the second variable corresponding to a premium for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

45. (Cancel) The computer system of Claim 43, wherein:
the plurality of derivative characteristics further includes a volatility; and
the processing facility is further operable to create the report having the second variable corresponding to a volatility for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

46. (Cancel) The computer system of Claim 43, wherein:
the plurality of derivative characteristics further includes a volume; and
the processing facility is further operable to create the report having the second variable corresponding to a volume for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

47. (Cancel) The computer system of Claim 43, wherein:
the plurality of derivative characteristics further includes an open interest; and
the processing facility is further operable to create the report having the second variable corresponding to an open interest for the identified derivative having the strike price closest to the at-the-money value at the time indicated by the first variable.

48. (Cancel) The computer system of Claim 73, wherein:

the processing facility is further operable to identify the derivatives having the relative reference value satisfying the reference criteria by identifying for each time increment the derivative having a strike price within a selected range of the at-the-money value.

49. (Cancel) The computer system of Claim 48, wherein:
the plurality of derivative characteristics further includes a premium; and
the processing facility is further operable to create a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

50. (Cancel) The computer system of Claim 49, wherein:
the processing facility is further operable to create the report having the second variable corresponding to a premium for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

51. (Cancel) The computer system of Claim 49, wherein:
the processing facility is further operable to create the report having the second variable corresponding to a volatility for the identified derivative having the strike price within a selected range of the at-the-money value at the time indicated by the first variable.

52. (Cancel) The computer system of Claim 66, wherein:
the plurality of derivative characteristics includes a trade date and an absolute expiration date; and
the processing facility is further operable to determine the relative reference value for each derivative by calculating a relative expiration date for each derivative based on the trade date and the absolute expiration date.

53. (Cancel) The computer system of Claim 74, wherein:
the processing facility is further operable to select the reference criteria for evaluating the derivatives by querying a user for a desired relative expiration date; and
the processing facility is further operable to identify each derivative having the relative reference value satisfying the reference criteria by identifying each derivative having a relative expiration date matching the desired relative expiration date.

54. (Cancel) The computer system of Claim 53, wherein:
the processing facility is further operable to create a report having a first variable corresponding to time and a second variable corresponding to a characteristic for the identified derivative having a relative expiration date matching the desired relative expiration date at the time indicated by the first variable.

55. (Cancel) The computer system of Claim 74, wherein:
the relative expiration date is a time until expiration;
the processing facility is further operable to select the reference criteria for evaluating the derivatives by selecting a range of times until expiration; and
the processing facility is further operable to identify each derivative having a relative reference value satisfying the reference criteria by selecting for each time until expiration within the selected range of times until expiration all derivatives having a matching time until expiration.

56. (Cancel) The computer system of Claim 55, wherein:
the processing facility is further operable to create a report having a first variable corresponding to the selected range of times until expiration and a second variable corresponding to a characteristic for the identified derivative having a relative reference value satisfying the reference criteria at the time until expiration indicated by the first variable.

57. (Cancel) A method performed on a computer for analyzing historical option market data, the method comprising:
storing in a database a plurality of option characteristics for each option in a plurality of options;

storing in the database a plurality of underlying instrument characteristics for the underlying instruments of the plurality of options;

determining one or more relative reference value(s) for each option in the plurality of options, said relative reference value(s) being a function of one or more characteristic(s) of the option and one or more analysis characteristic(s);

selecting reference criteria for evaluating the options; and

identifying each option having a relative reference value satisfying the reference criteria.

58. (Cancel) The method of Claim 57, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

59. (Cancel) The method of Claim 58, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

60. (Cancel) The method of Claim 59, wherein the step of determining the calculated option characteristics comprises determining an implied volatility for each option in the plurality of options.

61. (Cancel) The method of Claim 59, further comprising transmitting reports over a communication network.

62. (Cancel) The method of Claim 59, wherein:
the plurality of option characteristics includes a strike price, a trade date, and an expiration date;
the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the step of determining a relative reference value for each option comprises calculating a relative strike price based on the strike price of each option, the market price of the underlying instrument and additional data such as time until expiration.

63. (Cancel) The method of claim 59, wherein the step of identifying the options having the relative reference value satisfying the reference criteria:
identifies the options having that reference value or
identifies the options in a range of specified reference values or
calculates an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics in the database

64. (Cancel) The method of Claim 59, wherein:
The step of creating a report includes the ability to create mathematical functions of the characteristics of the identified options.

65. (Cancel) The method of Claim 57, wherein:
the plurality of option characteristics includes a trade date and an absolute expiration date; and
the step of determining a relative reference value for each option comprises calculating a relative expiration date for each option based on the trade date and the absolute expiration date.

66. (Cancel) A computer system for historical options market analysis, comprising:
a database operable to maintain a plurality of option characteristics for each option in a plurality of options and a plurality of underlying instrument characteristics for underlying instruments of the plurality of options; and
a processing facility coupled to the database, the processing facility operable to:
determine one or more relative reference value(s) for each option in the plurality of options, said relative reference value being a function of one or more characteristic(s) of the option and one or more analysis characteristic(s);
select a reference criteria for evaluating the options; and
identify each option having a relative reference value satisfying the reference criteria.

67. (Cancel) The computer system of Claim 66, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

68. (Cancel) The computer system of Claim 66, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

69. (Cancel) The computer system of Claim 68, wherein the processing facility is further operable to determine an implied volatility for each option in the plurality of options.

70. (Cancel) The computer system of Claim 68, further comprising a user interface coupled to the processing facility operable to provide reports to users over a communication network.

71. (Cancel) The computer system of Claim 68, wherein:
the plurality of option characteristics includes a strike price, a trade date, and an expiration date;
the plurality of underlying instrument characteristics includes a market price for the underlying instrument; and
the processing facility is further operable to determine a relative reference value for each option in the plurality of options by calculating a relative strike price based on the strike price of each option, the market price of the underlying instrument and additional data such as time until expiration.

72. (Cancel) The computer system of claim 68, that is operable to identify the options having the relative reference value satisfying the reference criteria:
by identifying the options having that reference value or
by identifying the options in a range of specified reference values or
by calculating an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics in the database.

73. (Cancel) The computer system of Claim 70, that is operable to create reports that have as one of the variables mathematical functions of the characteristics of the identified options.

74. (Cancel) The computer system of Claim 66, wherein:
the plurality of option characteristics includes a trade date and an absolute expiration date; and
the processing facility is further operable to determine the relative reference value for each option by calculating a relative expiration date for each option based on the trade date and the absolute expiration date.

75. (New) A method performed on a computer for analyzing historical option market data, the method comprising:
storing a plurality of option characteristics for each option in a plurality of options;
determining one or more relative reference value(s) for each option in the plurality of options, said relative reference value(s) being a function of one or more characteristic(s) of the option and one or more analysis characteristic(s);
selecting reference criteria for evaluating the options; and
identifying each option having a relative reference value satisfying the reference criteria.

76. (New) The method of Claim 75, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

77. (New) The method of Claim 76, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

78. (New) The method of Claim 77, wherein the step of determining the calculated option characteristics comprises determining an implied volatility for each option in the plurality of options.

79. (New) The method of claim 78, wherein the step of identifying the options having the relative reference value satisfying the reference criteria:

identifies the options having that reference value or
identifies the options in a range of specified reference values or
calculates an interpolated or extrapolated value that satisfies the specified reference value based on
relevant option characteristics.

80. (New) The method of Claim 78, wherein:
The step of creating a report includes the ability to create arbitrary mathematical
functions of the characteristics of the identified options.

81. (New) A method performed on a computer for analyzing historical option market data,
the method comprising:
storing a plurality of option characteristics for each option in a plurality of options;
determining a relative reference value for each option based on a formulation of the relationship of
the option strike price and the market price of the underlying instrument using a subset of the following:
option strike price, option type, exercise style, underlying instrument market price, appropriate interest rate,
trade date, option expiration date, underlying instrument cash flow projections, volatility, option delta;
selecting reference criteria for evaluating the options; and
identifying each option having a relative reference value satisfying the reference criteria.

82. (New) The method of Claim 81, wherein the options in the plurality of options are equity
options or equity linked securities having embedded options.

83. (New) The method of Claim 82, wherein the options in the plurality of options are
contracts based on a comprehensive set of underlying instruments.

84. (New) The method of Claim 83, wherein the step of determining the calculated option
characteristics comprises determining an implied volatility for each option in the plurality of options.

85. (New) The method of claim 84, wherein the step of identifying the options having the
relative reference value satisfying the reference criteria:
identifies the options having that reference value or
identifies the options in a range of specified reference values or
calculates an interpolated or extrapolated value that satisfies the specified reference value based on
relevant option characteristics.

86. (New) The method of Claim 85, wherein:
The step of creating a report includes the ability to create arbitrary mathematical
functions of the characteristics of the identified options.

87. (New) A method performed on a computer for analyzing historical option market data,
the method comprising:
storing a plurality of option characteristics for each option in a plurality of options where the
characteristics includes a trade date and an absolute expiration date;
determining a relative reference value for each option corresponding to a relative expiration date
based on the trade date and the option expiration date;
selecting reference criteria for evaluating the options; and
identifying each option having a relative reference value satisfying the reference criteria.

88. (New) The method of Claim 87, wherein the options in the plurality of options are equity
options or equity linked securities having embedded options.

89. (New) The method of Claim 88, wherein the options in the plurality of options are
contracts based on a comprehensive set of underlying instruments.

90. (New) The method of Claim 89, wherein the step of determining the calculated option
characteristics comprises determining an implied volatility for each option in the plurality of options.

91. (New) The method of claim 90, wherein the step of identifying the options having the relative reference value satisfying the reference criteria:
identifies the options having that reference value or
identifies the options in a range of specified reference values or
calculates an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics.

92. (New) The method of Claim 91, wherein:
The step of creating a report includes the ability to create arbitrary mathematical functions of the characteristics of the identified options.

93. (New) A computer system for historical options market analysis, comprising:
a database operable to maintain a plurality of option characteristics for each option in a plurality of options; and
processing software coupled to the database, the processing software operable to:
determine one or more relative reference value(s) for each option in the plurality of options, said relative reference value being a function of one or more characteristic(s) of the option and one or more analysis characteristic(s);
select a reference criteria for evaluating the options; and
identify each option having a relative reference value satisfying the reference criteria.

94. (New) The computer system of Claim 93, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

95. (New) The computer system of Claim 94, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

96. (New) The computer system of Claim 95, wherein the processing software is further operable to determine an implied volatility for each option in the plurality of options.

97. (New) The computer system of claim 96, that is operable to identify the options having the relative reference value satisfying the reference criteria:
by identifying the options having that reference value or
by identifying the options in a range of specified reference values or
by calculating an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics.

98. (New) The computer system of Claim 97, that is operable to create reports that have arbitrary mathematical functions of the characteristics of the identified options.

99. (New) A computer system for historical options market analysis, comprising:
a database operable to maintain a plurality of option characteristics for each option in a plurality of options; and
processing software coupled to the database, the processing software operable to:
determine a relative reference value for each option based on a formulation of the relationship of the option strike price and the market price of the underlying instrument using a subset of the following: option strike price, option type, exercise style, underlying instrument market price, appropriate interest rate, trade date, option expiration date, underlying instrument cash flow projections, volatility, option delta;
select a reference criteria for evaluating the options; and
identify each option having a relative reference value satisfying the reference criteria.

100. (New) The computer system of Claim 99, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

101. (New) The computer system of Claim 100, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

102. (New) The computer system of Claim 101, wherein the processing software is further operable to determine an implied volatility for each option in the plurality of options.

103. (New) The computer system of claim 102, that is operable to identify the options having the relative reference value satisfying the reference criteria:
by identifying the options having that reference value or
by identifying the options in a range of specified reference values or
by calculating an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics.

104. (New) The computer system of Claim 103, that is operable to create reports that have arbitrary mathematical functions of the characteristics of the identified options.

105. (New) A computer system for historical options market analysis, comprising:
a database operable to maintain a plurality of option characteristics for each option in a plurality of options; and
processing software coupled to the database, the processing software operable to:
determine a relative reference value for each option corresponding to a relative expiration date based on the trade date and the option expiration date;
select a reference criteria for evaluating the options; and
identify each option having a relative reference value satisfying the reference criteria.

106. (New) The computer system of Claim 105, wherein the options in the plurality of options are equity options or equity linked securities having embedded options.

107. (New) The computer system of Claim 106, wherein the options in the plurality of options are contracts based on a comprehensive set of underlying instruments.

108. (New) The computer system of Claim 107, wherein the processing software is further operable to determine an implied volatility for each option in the plurality of options.

109. (New) The computer system of claim 108, that is operable to identify the options having the relative reference value satisfying the reference criteria:
by identifying the options having that reference value or
by identifying the options in a range of specified reference values or
by calculating an interpolated or extrapolated value that satisfies the specified reference value based on relevant option characteristics.

110. (New) The computer system of Claim 109, that is operable to create reports that have arbitrary mathematical functions of the characteristics of the identified options.

REMARKS – General

Applicants have rewritten all claims to define the invention more particularly and distinctly so as to overcome the rejections and define the invention patentably over the prior art.

Claim 63 Rewritten

Claim 63 has been rewritten as claims 79, 85, 91 and has been completed with a period.

Claim 62 Rewritten to satisfy § 112

Claim 62 has been rewritten as claim 81. It defines the invention precisely and the phrase “such as” has been removed. In particular, the list of additional data has been provided.